## **Amendments to the Claims**:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for compressing an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, comprising:

selecting a set of N raster lines extending in said first direction;
reformatting the image by successively interleaving only a single
corresponding pixelspixel of each of the N raster lines extending in said second direction; and compressing the reformatted interleaved data.

2. (Currently Amended) The method of claim 1, wherein <u>successively</u> interleaving only <u>a single</u>the corresponding <u>pixelspixel</u> of <u>each of</u> the N selected raster lines comprises:

selecting a next pixel along the second direction from each of the N selected raster lines;

forming at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and storing the at least one byte.

- 3. (Original) The method of claim 1, wherein compressing the reformatted interleaved data compresses using at least one byte oriented compression technique to compress the reformatted interleaved data.
- 4. (Original) The method of claim 1, wherein the at least one byte oriented compression technique is at least one of LWZ, ZIP and Compress.

5. (Currently Amended) A method for decompressing compressed image data to form a restored image, comprising:

inputting compressed interleaved data;

decompressing the compressed interleaved data;

successively un-interleaving the decompressed interleaved data to create raster image data for the restored image by selecting at least one next byte of the decompressed interleaved data; and

distributing each bit of the at least one byte to <u>only a single</u> corresponding pixels in <u>each N raster lines of the restored image.</u>

- 6. (Canceled)
- 7. (Currently Amended) An image compression system that compresses an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, the system comprising:

a binary data reformatter that reformats raster image data of the original image by <u>successively</u> interleaving only <u>a single</u> corresponding <u>pixelspixel</u> of the original image <u>extending in said second direction</u>; and

a compressor that compresses the interleaved raster image data.

8. (Currently Amended) The image compression system of claim 7 wherein the binary data reformatter successively interleaves interleaving only a single corresponding pixelspixel of each of the N selected raster lines, the system by:

selects selecting a next pixel along the second direction from each of the N selected raster lines;

forms forming at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

storesstoring the at least one byte.

- 9. (Original) The image compression system of claim 7, wherein the compressor is a byte-oriented compressor.
- 10. (Original) The image compression system of claim 7, wherein the compressor uses at least one of LWZ, ZIP and Compress.
- 11. (Currently Amended) An image decompression system that decompresses compressed image data to form a restored image, the system comprising:

a decompressor that decompresses the compressed interleaved data that was reformatted by <u>successively</u> interleaving only <u>a single</u> corresponding <u>pixelspixel</u> of the data;

an inverse binary data reformatter that <u>successively</u> un-interleaves the interleaved data and forms a raster image data of the restored image by selecting at least one next byte of the decompressed interleaved data and distributing each bit of the at least one byte <u>only</u> to <u>a single</u> corresponding <u>pixelspixel</u> in <u>each of the</u> N raster lines of the restored image; and

an output controller that outputs the un-interleaved data to an output device.

- 12. (Original) The original image decompression system of claim 11, wherein the decompressor is a byte-oriented compressor technique decompressor.
- 13. (Currently Amended) A method of compressing and decompressing image data, comprising:

reformatting binary image data into reformatted image data by <u>successively</u> interleaving only <u>a single</u> corresponding <u>pixelspixel</u> of <u>each of the N</u> selected raster lines; compressing the reformatted image data;

decompressing the compressed reformatted image data; and reverse reformatting the decompressed image data into binary image data.

- 14. (Previously Presented) The method of claim 13, further comprising transmitting the compressed reformatted image data between the compressing and decompressing steps.
- 15. (Previously Presented) The method of claim 14, further comprising receiving the compressed reformatted image data between the transmitting and decompressing steps.
- 16. (Previously Presented) The method of claim 13, further comprising storing the compressed reformatted image data between the compressing and decompressing steps.
- 17. (Previously Presented) The method of claim 16, further comprising retrieving the compressed reformatted image data between the storing and decompressing steps.
- 18. (Currently Amended) A method for compressing and decompressing an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, and decompressing compressed image data to form a restored image, comprising:

selecting a set of N raster lines extending in said first direction;
reformatting the image by successively interleaving only a single
corresponding pixelspixel of each of the N raster lines extending in said second direction;
compressing the reformatted interleaved data;

decompressing the compressed interleaved data; and

successively un-interleaving the decompressed interleaved data to create raster image data for the restored image, the raster image data defining a plurality of raster lines extending in a final first direction, each raster line having a plurality of pixels extending in a second direction.

19. (Previously Presented) The method of claim 18, wherein interleaving the pixels of the N selected raster lines comprises:

selecting a next pixel along the second direction from each of the N selected raster lines;

forming at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and storing the at least one byte.

- 20. (Previously Presented) The method of claim 18, wherein compressing the reformatted interleaved data compresses using at least one byte oriented compression technique to compress the reformatted interleaved data.
- 21. (Previously Presented) The method of claim 18, wherein the at least one byte oriented compression technique is at least one of LWZ, ZIP and Compress.
- 22. (Currently Amended) The method of claim 18, wherein un-interleaving the decompressed interleaved data to the raster image data of the restored image, comprises:

  selecting at least one next byte of the decompressed interleaved data; and distributing each bit of the at least one byte only to a single corresponding pixelspixel in each of the N raster lines of the restored image.
- 23. (Currently Amended) An image compression and decompression system that compresses an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, and decompresses compressed image data to form a restored image, the system comprising:

a binary data reformatter that reformats raster image data of the original image by <u>successively</u> interleaving only <u>a single</u> corresponding <u>pixelspixel</u> of the original image <u>extending in said second direction</u>;

a compressor that compresses the interleaved raster image data; a decompressor that decompresses the compressed interleaved data; an inverse binary data reformatter that <u>successively</u> un-interleaves the interleaved data and forms a raster image data of the restored image by selecting at least one next byte of the decompressed interleaved data and distributing each bit of the at least one byte to <u>only a single</u> corresponding <u>pixelspixel</u> in N raster lines of the restored image; and an output controller that outputs the un-interleaved data to an output device.

24. (Previously Presented) The image compression system of claim 23, wherein interleaving the pixels of the N selected raster lines, the system:

selects a next pixel along the second direction from each of the N selected

raster lines;

forms at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

stores the at least one byte.

- 25. (Previously Presented) The image compression system of claim 23, wherein the compressor is a byte-oriented compressor.
- 26. (Previously Presented) The image compression system of claim 23, wherein the compressor uses at least one of LWZ, ZIP and Compress.
- 27. (Previously Presented) The original image decompression system of claim 23, wherein the decompressor is a byte-oriented compressor technique decompressor.